B.B.M.P

BRUHAT BENGALURU MAHANAGARA PALIKE

YELAHANKA ZONE

DIVISION: BYATARAYANAPURA

SUB DIVISION: KODIGEHALLI

Name of Work: Estimate for Improvements to Roads, Drains and Construction of Culverts at Dasarahalli Village in Ward No. 09.

Estimated Cost Rs. 45.00 Lakhs

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK:- Improvements to Roads, Drains and Construction of Culverts at Dasarahalli Viliage in Ward No. 09.

Estimation Cost.Rs 4500000.00

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
1	Earth work Excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. **(PWD SR 2021-22 Vol -I Pg No 5 item no 1.4.1)**	Cum							
	New Drain								
	Govt School Road, Dasarahalli		2	168.00	1.00	1.00	336.00		
	Culvert								
			1	6.00	2.00	1.20	14.40		
	Basic rate	186.00							
	Area weightage 10%	18.60							
	Sub Total	204.60							
	Total						**350.40**	204.60	**71692.00**
2	Providing and laying in position Plain Cement Concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. **(PWD SR 2021-22 Vol -I Pg 15 item no 2.1.3)**	Cum							
	New Drain								
	Govt School Road, Dasarahalli		2	168.00	0.90	0.15	45.36		
	Culvert								
			1	6.00	1.80	0.15	1.62		
	Issued Rate 07-07-2022 Basic rate	5554.00							
	Area weightage 10%	555.40							
	Sub Total	6109.40							

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
	Total						**46.98**	6109.40	**287020.00**
3	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand) **Item No. 5.4, Page No. 9, Vol - II PWD SR 2021-22**	Cum							
	Culvert								
	SSM Wall								
	First Course								
			2x1	6.00	0.60	0.45	3.24		
	Second Course								
			2x1	6.00	0.45	0.45	2.43		
	Basic rate	5422.00							
	Area weightage 10%	542.20							
	Sub Total	**5964.20**							
	Total						**5.67**	5964.20	**33817.00**
4	Providing ruled pointing to cursed stone masonry with lime mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost all materials, labour, usage charges of machinery, curing complete as pre specification. **Item No. 21.10 Page No. 190, Vol - II PWD SR 2021-22**	Sqm							
	Pointing		2x1	6.00		0.90	10.80		
	Basic rate	238.00							
	Area weightage 10%	23.80							
	Sub Total	**261.80**							
	Total						**10.80**	261.80	**2827.00**
5	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 (The cost of steel reinforcement & formwork to be paid separately) **(PWD SR 2021-22 Vol -I Pg 17 item no 2.4.2))**	Cum							
	New Drain								
	Raft								

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
	Govt School Road, Dasarahalli		2	168.00	0.90	0.15	45.36		
	Side Wall								
	Govt School Road, Dasarahalli		2x2	168.00	0.15	0.60	60.48		
	Issued Rate 07-07-2022 Basic rate	5968.00							
	Add 5% for Shuttering	298.40							
		6266.40							
	Area weightage 10%	626.64							
	Sub Total	**6893.04**							
	Total						**105.84**	6893.04	**729559.00**
6	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications. MORTH Specification NO.1600&2200 **(PWD SR 2021-22 Vol - III Pg 99 item no 13.1)**								
	For Drain	Cum					105.84		
		kg	Steel assumed 60Kg/Cum of Concrete				0.06		
		tonne					**6.35**		
	Issued Rate 07-07-2022 Basic rate	92170.00							
	Area weightage 10%	9217.00							
	Sub Total	**101387.00**							
	Total						**6.35**	101387.00	**643848.00**
7	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite / trap / basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately **Mix 1:3:6 (M10) Using 20 mm nominal size graded crushed coarse aggregate (PWD SR 2021-22 Vol - I Pg 15 item no 2.1.4))**	Cum							
	Coping & Vent Concrete								
			1	6.00	1.50	0.10	0.90		
	Ramp								
			2x1	6.00	1.00	0.15	1.80		
	Issued Rate 07-07-2022 Basic rate	5728.00							
	Area weightage 10%	572.80							
	Sub Total	6300.80							
	Total						**2.70**	6300.80	**17012.00**

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
8	Providing and Fixing pre cast Covering Slab made out of CC 1:2:4 with **10cm** thick and Finishing cutting, including form work,curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, copmplete. (**Approved Data Rate**)	Sqm							
	Missing Covering Slab								
	Govt School Road, Dasarahalli		2	168.00	0.90		302.40		
	Data rate	2337.00							
	Total						**302.40**	2337.00	**706709.00**
9	Providing and Fixing pre cast Covering Slab **250mm** thick made out of CC 1:2:4 and jelly 25mm Down size with steel reinforcement including form work,curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete. As per Engineer incharge **(Approved Data Rate)**	Sqm							
	For Culvert								
			1	6.00	1.50		9.00		
	Data rate	5418.00							
	Total						**9.00**	5418.00	**48762.00**
10	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 m3 in volume and stock piling at designated locations and disposal of dismantled materials and stacking serviceable and unserviceable materials separately MORTH Specification No. 202 **(PWD SR 2021-22 Vol -III P.No.10 - I.No.2.19)**	Cum							
	CC Road								
	Govt School Road, Dasarahalli		1	168.00	4.50	0.15	113.40		
	Basic rate	422.00							
	Area weightage 10%	42.20							
	Sub Total	464.20							
	Total						**113.40**	464.20	**52640.00**

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
11	Construction of Dry Lean Cement Concrete Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm,aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ m3 , optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 t vibratory roller, finishing and curing. MORTH Specification No. 601 **(PWD SR 2021-22 Vol - III P.No. 43 - I.No. 6.1)**	Cum							
	CC Road								
	Govt School Road, Dasarahalli		1	168.00	4.50	0.10	75.60		
	Issued Rate 07-07-2022 Basic rate	4025.00							
	Area weightage 10%	402.50							
	Sub Total	4427.50							
	Total						**75.60**	4427.50	**334719.00**
12	Providing and constructing un-reinforced plain Cement Concrete Pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS: 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including construction joints, primer, sealant, curing of concrete slabs for 14- days, and water finishing to lines and grade as per drawing and technical specification clause 1501 with all lead, lifts, loading & unloading charges, cost and conveyance of all materials, labour, equipments etc., complete MORTH Specification No.1501 . as per the directions of the Engineer-in-charge of the work. **(PWD SR 2021-22 Vol -III Pg 138 item no 20.20)**	Cum							
	CC Road								
	Govt School Road, Dasarahalli		1	168.00	4.50	0.15	113.40		
	Issued Rate 07-07-2022 Basic rate	6512.00							

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
	Area weightage 10%	651.20							
	Sub Total	7163.20							
	Total						**113.40**	7163.20	**812307.00**
13	Loading and Unloading of Stone Boulder / Stone aggregates / Sand / Kankar / Moorum. (Tipper 14 m3) **(PWD SR 2021-22 Vol-III Page No.3, Item No.1.1C)**	Cum							
	Qty Vide 90% of Item No- (1)						315.36		
	Total						**315.36**	81.40	**25670.00**
	Basic rate	74.00							
	Area Weightage 10%	7.40							
	Total	81.40							
14	Cost of Haulage Excluding Loading and Unloading Taking output 18 t load and lead 10 km = 180 t.km **(PWD SR 2021-22 Vol-III Page No.3, Item No.1.4B)**	T.Km							
	Qty frm Item No-13			315.36	1.28		403.66		
	Total						**403.66**	115.50	**46623.00**
	15Km 7*15	105.00							
	Area Weightage 10%	10.50							
	Total	115.50							
								Grand Total	**3813205.00**
							GST Charges (18% of Executed cost)		**686377.00**
							Miscellenious and rounding off		**418.00**
								Total Amount	**4500000.00**
Rupees Forty Five Lakh(s) Only									

CERTIFICATE:

1) The work spot has been inspected and found to be necessary.
2) The work spot comes under B.B.M.P Limits.
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on C.S.R of PWD 2021-22, Issue rates and Data Rates.

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Kodigehalli Sub Division

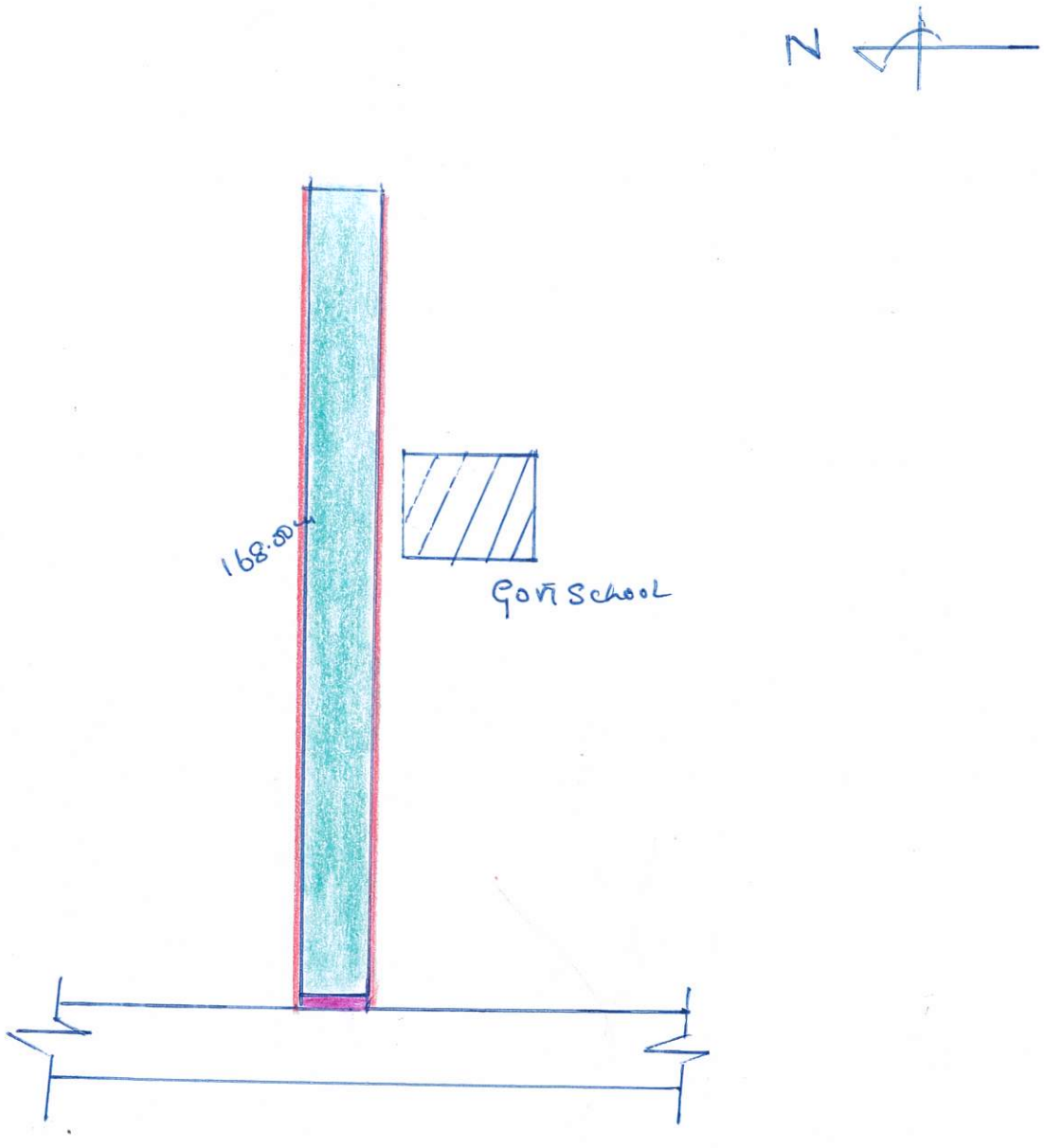
Executive Engineer
Byatarayanapura Division

Administrative Approval
Accorded For Rs. 45.00Lakhs
Head of A/C P3726
CER NO : 167 Dt:

TA CE (NK)

Technical Sanction
Accorded For Rs. 45.00Lakhs
Head of A/C P3726
CER NO : 167 Dt: 16/9/22

Name of Work: Improvements to Roads, Drains and Construction of Culverts at Dasarahalli Village in Ward No. 09.

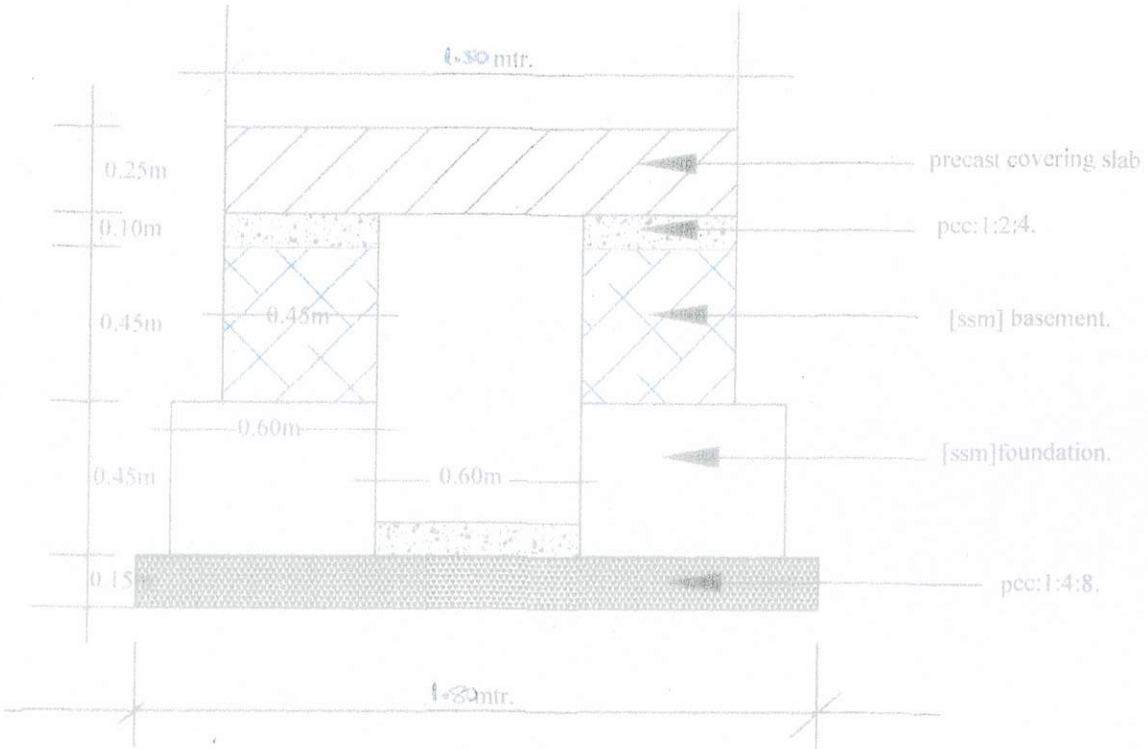


INDEX:

- CC Road
- CC Drain
- Culverts

Assistant Engineer
Ward No. 09

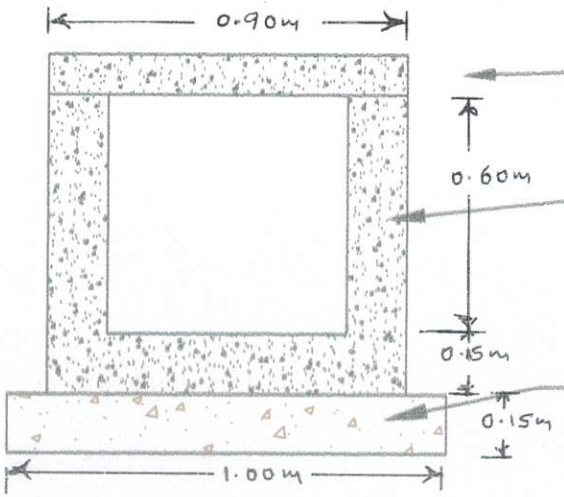
Assistant Executive Engineer
Kodigehalli Sub Division



CROSS SECTION OF CULVERT

ASSISTANT ENGINEER.

ASSISTANT EXECUTIVE ENGINEER.

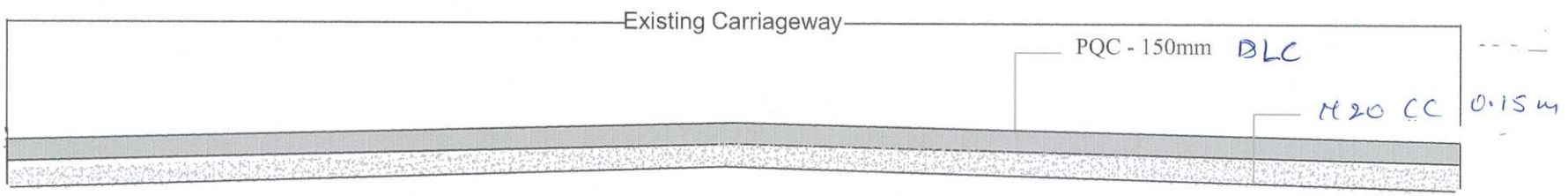


Precost slab Thick.

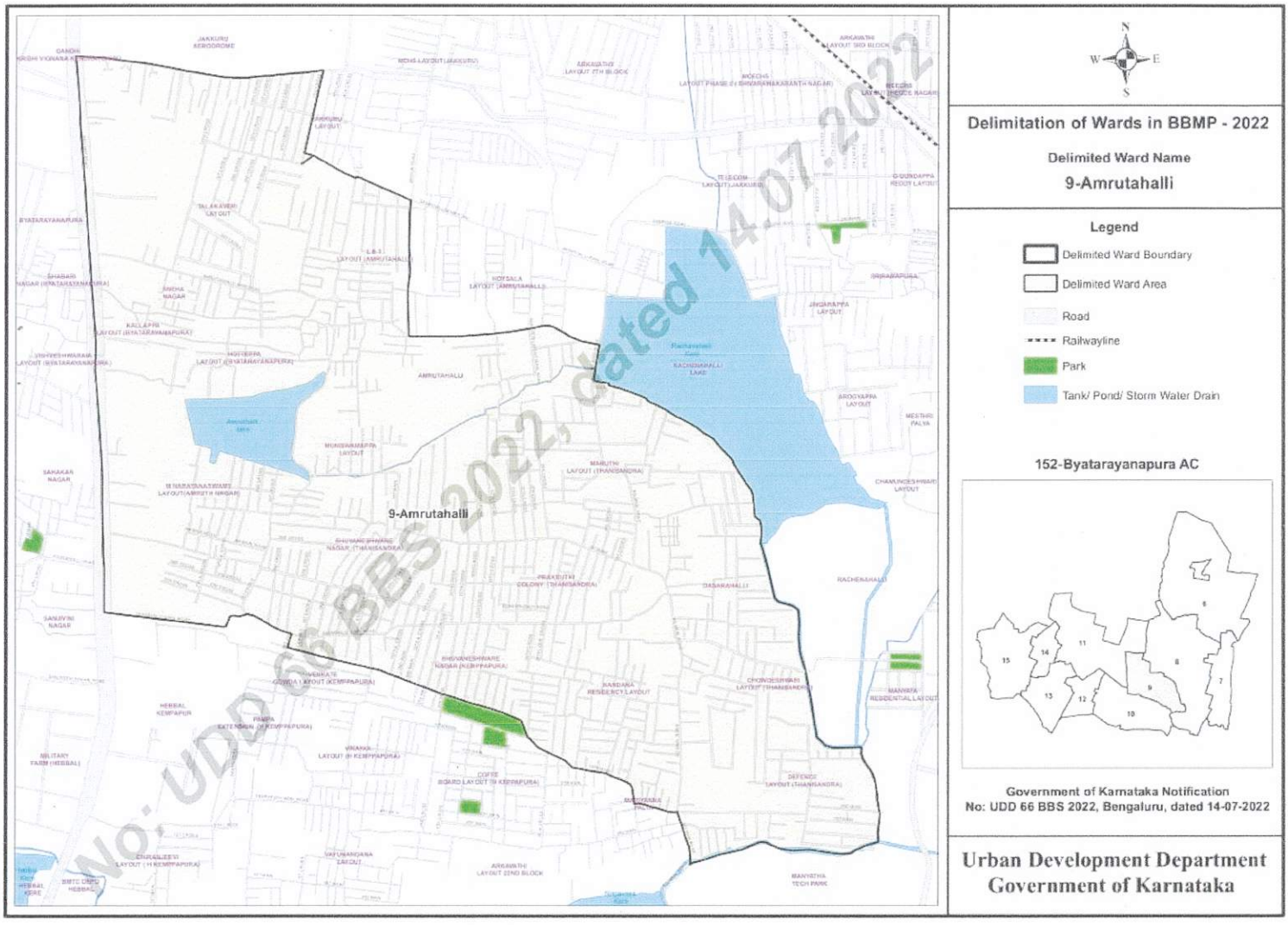
RCC WALL M-20 Thick 0.15.

PCC 1:4:8 Thick 0.15m.

CROSS SECTION OF CC DRAIN



TYPICAL CROSS SECTION FOR CC ROAD


9-Amrutahalli
No: UDD 66 BBS 2022, dated 14.07.2022
N
W
E
S
Delimitation of Wards in BBMP - 2022
Delimited Ward Name
9-Amrutahalli
Legend
Delimited Ward Boundary
Delimited Ward Area
Road
Railwayline
Park
Tank/ Pond/ Storm Water Drain
152-Byatarayanapura AC
Government of Karnataka Notification
No: UDD 66 BBS 2022, Bengaluru, dated 14-07-2022
Urban Development Department
Government of Karnataka